



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,639	10/24/2001	Cesar C. Carriazo	CARA/0013	1980

24945 7590 03/20/2003

STREETS & STEELE
13831 NORTHWEST FREEWAY
SUITE 355
HOUSTON, TX 77040

EXAMINER

DAVIS, DANIEL J

ART UNIT PAPER NUMBER

3731

DATE MAILED: 03/20/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/002,639	CARRIAZO, CESAR C.	
	Examiner	Art Unit	
	D Jacob Davis	3731	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Change of address 9/10/02.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3 and 6-32 is/are rejected.
- 7) ☒ Claim(s) 2,4 and 5 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 October 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) <u>3,4</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the elements of claims 21-32 must be shown or the features canceled from the claim. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 10-32 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The ring materials are not disclosed in the specification. The kit comprising a plurality of rings is not mentioned. Claim 21 cites means for driving, the scope of which cannot be determined in view of the specification since no

driving means is disclosed. The cutting path being horizontal or pendular is also not cited in the specification.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 6, 7, 16, 17, 26 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The claims recite the limitation "the non-circular" in line 1. There is insufficient antecedent basis for this limitation in the claims.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3, and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Hellenkamp (US 6,007,553). Hellenkamp discloses a surgical device for cutting the cornea (Fig. 4-10B) comprising a ring 32, a vacuum channel 37, and circular inferior and superior engaging surfaces each having a convex surface. The ring is made of stainless steel (Col. 6, lines 65-67).

Claims 21, 23, 28, 30 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by Carriazo et al. (US 5,980,543). Carriazo discloses a microkeratome corneal resection device comprising a circular ring 100 having a vacuum channel and aperture, a blade, a cutting head 230, a compression device 50, and drive means 20. The cutting path is horizontal.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11, 13, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Amano (US 6,506,198) in view of Hellenkamp. Amano discloses the typical kit with a microkeratome comprising a plurality of rings having varied aperture diameters and vacuum suction (Col. 1, lines 23-62). The device inherently would have a fixed dimension surface. Amano fails to disclose a vacuum channel that is annular, and that the rings have circular inferior and superior engaging surfaces each having a convex surface. He also fails to disclose that the ring is made of stainless steel.

Nevertheless, Hellenkamp discloses an annular vacuum channel (Fig. 4). He also discloses circular inferior and superior engaging surfaces each having a convex surface. This enables a better matching contact surface with the eye. The ring is made of stainless steel (Col. 6, lines 65-67), which is durable and biocompatible. Therefore, it

would have been obvious to one of ordinary skill in the art at the time the invention was made to make the ring disclosed by Amon to have convex circular superior and inferior engaging surfaces enabling a better matching contact surface with the eye. Also, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the ring out of stainless steel because it is durable and biocompatible.

Claims 11, 13, 18, 19, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hellenkamp in view of Amono. Hellenkamp discloses a surgical device for cutting the cornea (Fig. 4-10B) comprising a ring 32 having an aperture (Fig. 2), a fixed dimension interface 43, a vacuum channel 37, and circular inferior and superior engaging surfaces each having a convex surface. The ring is made of stainless steel (Col. 6, lines 65-67).

Hellenkamp fails to disclose a plurality of rings having a different aperture dimension or shape. Nevertheless, Amano teaches that a plurality of rings having different aperture diameters is normally required in order to cut the cornea flaps at various diameters (Col. 1, lines 49-55). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have a plurality of rings having various diameters enabling a surgeon to choose the appropriate cornea flap cut diameter.

Claim 29 is rejected under 35 U.S.C. 103(a) as being unpatentable over Carriazo in view of Hellenkamp. Carriazo does not disclose that the inferior and superior

Art Unit: 3731

engaging surfaces of the ring are concave. Nevertheless, Hellenkamp discloses inferior and superior engaging surfaces that are concave enabling a better matching contact surface with the eye. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to make the inferior and superior engaging surfaces of the ring concave, enabling a better matching contact surface with the eye.

Allowable Subject Matter

Claims 2 and 4-7 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 6 and 7 would be allowable if rewritten to overcome the rejection under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

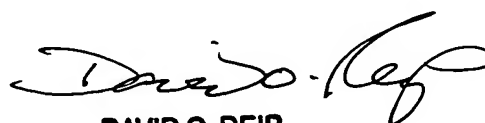
Any inquiry concerning this communication or earlier communications from the examiner should be directed to D Jacob Davis whose telephone number is (703) 305-1232. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Milano can be reached on (703) 308-2496. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305-3590 for regular communications and (703) 305-3590 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0858.


DJD

March 12, 2003



DAVID O. REIP
PRIMARY EXAMINER